

**REMARKS**

Claims 2, 4, 7 and 10 are pending in the present application. Claims 2, 4, 7 and 10 are herein amended. No new matter has been presented.

Applicants herein effect a similar amendment of "synergistically effective amounts of in the present invention" as was suggested by the U.S. Patent Office in related patent application No. 10/500,355, which amendment led to its allowance.

The amendment in the amended claims 2, 4, 7 and 10 "synergistically effective amounts of is supported by the description in paragraph [0073] of the present specification, wherein it is described that , "it can be known that it enhances the antibacterial activity which 1,2-alkanediol originally has against a broad range of strains to use 1,2-alkanediol in combination with a certain fragrance component such as thymol, eugenol, citronellal, terpinyl acetate, citronellol and 13-pinene." and in paragraph [0061] of the present specification, where it is describe that, "Synergistic action is the action in that two kinds of agent act synergistically, to enhance the antibacterial activity that the agents originally have."

The amendment in the amended claim 2 "consisting of and claims 4, 7 and 10 "the group consisting of is amended in order to make their meaning clear.

**Claim Rejections - 35 U.S.C. §103(a)**

Claims 2, 4, and 7 are rejected under 35 U.S.C. §103(a) as being obvious over Clarkson et al. (US Patent Application 2001/0036964 A1) in view of McCue et al. (US Patent 5,403,587).

Claim 10 is rejected under 35 U.S.C. §103(a) as being obvious over Clarkson et al. (US Patent Application 2001/0036964 A1) and McCue et al. (US Patent 5,403,587) as applied to claims 1-9 in view of Jensen et al. (US Patent 2,550,255).

The Examiner notes Applicants' argument that the claim limitation, "wherein said 1,2-octanediol and said materials are comprised in weight ratio between 1:1 to 10:1" corresponds to the test results in the specification and the previous declaration showing synergism, and notes Applicants' assertion that Example 1 showing 1,2-alkanediol and eugenol in a ratio of 2.5:1 provides further support for the claimed range.

The Examiner maintains that even though the Declaration shows synergistic results between 1,2-octanediol and eugenol, citronellal, terpinyl acetate, citronellol, and  $\beta$ -pinene, the Declaration is still not commensurate with the scope of the amended claims. The Examiner notes that the raw data as depicted in the Declaration and Figures are from the experimental guidelines of Embodiment 1 as disclosed in the specification. Examiner notes that Embodiment 1 sets forth specific dilution concentrations for 1,2-octanediol and a 50:50 weight mixture between 1,2-octanediol and thymol. The Examiner concludes that there is no unexpectedly superior data for the upper limit of the claimed ratio of 10:1.

Applicants refer to related patent Application No. 10/500,355. In the now-allowed application, Applicants amended the claims to recite language including:

"An antiseptic disinfectant containing synergistically effective amount of 1,2-alkanediol with 5-10 carbons, and one or more materials selected from the group

consisting of citral, geraniol, nerol, perillaldehyde,  $\alpha$ -terpineol, dodecanol and L-carvone wherein said 1,2-alkanediol is 1,2-octanediol.”

By such recitation, Applicants no longer claimed a specific ratio of 1,2-octanediol and additive. Rather, by reciting a “synergistically effective amount”, Applicants claimed any amount that one skilled in the art would expect is covered by the specification upon reading the specification.

Applicants herein adopt such amendments. Applicants further include amendments to correct the Markush language employed by the claims.

US Patent Application No. 2001/0036964A1 (Clarkson et al.)

The invention relates to an anti-microbial composition comprising polyhydric alcohol or derivative thereof. (Abstract).

“Preferred polyhydric alcohols and derivatives thereof are of molecular weight 60 to 500. Particularly preferred materials are 1,2-pentanediol, 1,2-hexanediol, 1,2-octanediol...” (Paragraph [0065]).

“when used on the human body, the compositions and methods of the invention are of greatest benefit when used on the most malodorous areas of the human body, for example the underarm areas or feet”. (Paragraph [0001]).

“Fragrance is also a desirable additional component in the compositions of the invention. Suitable materials include conventional perfumes...” (Paragraph [0086]).

US Patent No. 5,403,587 (McCue et al.)

“This invention relates to aqueous antimicrobial compositions which can used to sanitize, disinfect and clean hard surfaces. The compositions include essential oils having antimicrobial properties.” (Column 1, line 5).

“Such essential oil include...citronella, eucalyptus, peppermint, camphor...” (Column 3, line 61).

“It is the further object of this invention to provide aqueous compositions which can be used as sanitizers, disinfectants and disinfectant cleaners” (Column 2, line 13).

US Patent No. 2,550,255 (Jensen et al.)

“The present invention relates to the preparation of a potent antibiotic substance, and it has to do more particularly with the concentration of an antimicrobial substance of plant origin.” (Column 1, line 1).

“As a result of the search for antibacterial agents, naturally occurring antibiotic substances have been prepared from plants, animal tissues, molds, antinomyces, yeast and bacteria” (Column 1, line 34).

“Yet another object of the invention is to provide an antibiotic substance which may be employed as an effective preservative for food products”. (Column 1, line 53).

In the previous response, Applicant submitted the declaration demonstrating a test result that shows unexpected effects obtained by combining 1,2-octanediol with particular fragrances (one or more materials selected from the group of eugenol, citronellal, terpinyl acetate, citronellol and (3- pinene). Further, the blending ratio of 1,2-octanediol and particular fragrances was limited to between 1:1 and 10:1 in weight ratio.

As admitted by the examiner, the synergistic results between 1,2-octanediol and particular fragrances are shown in the declaration when the blending ratio of 1,2-octanediol and particular fragrances is 50:50. Because such synergistic results are advantageous effects, it can be said that the composition described in the example 1 in the present specification has an inventive step.

Thus, in the amended claims 2, 4, 7 and 10, the amounts of 1,2-octanediol and particular fragrances are specified by using the expression of "synergistically effective amounts of 1,2-octanediol and fragrances". Such amounts of 1,2-octanediol and fragrances provide synergistic effects, the synergistic effects are unexpected by the cited references, and therefore the invention described in the amended claims can not be readily assumed by the person in the art.

Therefore, Applicants submit that the present invention described in the amended claims 2, 4, 7 and 10 are patentably distinguished over the cited references.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

Application No. 10/500,358  
Attorney Docket No. 042276

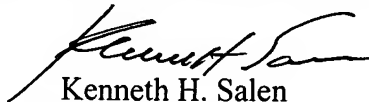
Amendment under 37 C.F.R. §1.111  
Amendment filed July 21, 2008

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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